

	GCTATAAGGA TCACGGGCCC CAGTCGACGC TGAGCTCCTC TGCTACTCAG AGTTGCAACC TCAGCCTCGCT									
ATG GCT CCC AGC AGC CCC CGG CCC GCG CTG CCC GCA CTC CTG GTC CTG CTC GGG GCT CTG TTC CCA										
MET ALA PRO SER SER PRO ARG PRO ALA LEU PRO ALA LEU PRO ALA LEU VAL LEU LEU GLY ALA LEU PHE PRO										
GGA CCT GGC AAT GCC CAG ACA TCT GTG TCC CCC TCA AAA GTC ATC CTG CCC CGG GGA GGC TCC GTG										
GLY PRO GLY ASN ALA GLN THR SER VAL SER PRO SER LYS VAL ILE LEU PRO ARG GLY GLY SER VAL										
CTG GTG ACA TGC AGC ACC TCC TGT GAC CAG CCC AAG TTG TTG GGC ATA GAG ACC CCG TTG CCT AAA										
LEU VAL THR CYS SER THR SER SER CYS ASP GLN PRO LYS LEU LEU GLY ILE GLU THR PRO LEU PRO LYS										
AAG GAG TTG CTC CTG CCT GGG AAC AAC CGG AAG GTG TAT GAA CTG AGC AAT GTG CAA GAA GAT AGC										
LYS GLU LEU LEU LEU PRO GLY ASN ASN ARG LYS VAL TYR GLU LEU SER ASN VAL GLN GLU ASP SER										
CAA CCA ATG TGC TAT TCA AAC TGC CCT GAT GGG CAG TCA ACA GCT AAA ACC TTC CTC ACC GTG TAC										
GLN PRO MET CYS TYR SER ASN CYS PRO ASP GLY GLN SER THR ALA LYS THR PHE LEU THR VAL TYR										
TGG ACT CCA GAA CGG GTG GAA CTG GCA CCC CTC CCC TCT TGG CAG CCA GTG GGC AAG AAC CTT ACC										
TRP THR PRO GLU ARG VAL GLU LEU ALA PRO LEU PRO SER TRP GLN PRO VAL GLY LYS ASN LEU THR										
CTA CGC TGC CAG GTG GAG GGT GGG GCA CCC CGG GCC AAC CTC ACC GTG CTG CTC CGT GGG GAG										
LEU ARG CYS GLN VAL GLU GLU VAL GLY GLY ALA PRO ARG ALA ASN LEU THR VAL LEU ARG GLY GLU										
AAG GAG CTG AAA CGG GAG CCA GCT GTG GGG GAG CCC GCT GAG GTC ACG ACC ACG GTG CTG GTG AGG										
LYS GLU LEU LYS ARG GLU PRO ALA VAL GLY GLU PRO ALA GLU VAL THR THR THR VAL LEU VAL ARG										
AGA GAT CAC CAT GGA GCC AAT TTC TCG TGC CGC ACT GAA CTG GAC CTG CGG CCC CAA GGG CTG GAG										
ARG ASP HIS HIS HIS GLY ALA ASN PHE SER CYS ARG THR GLU LEU ASP LEU ARG PRO GLN GLY LEU GLU										

FIG. 1A

CTG	TTT	GAG	AAC	ACC	TCG	GCC	GCC	CCC	TAC	CAG	CTC	CAG	CTC	ACC	TTT	GTC	CTG	CCA	GCG	ACT	CCC	CCA	CAA
LEU	PHE	GLU	ASN	THR	SER	ALA	PRO	TYR	GLN	LEU	GLN	THR	PHE	VAL	LEU	PRO	ALA	THR	PRO	PRO	GLN		
CTT	GTC	AGC	CCC	CGG	GTC	CTA	GAG	GTC	GAG	ACG	THR	GLN	GLY	ACC	GTC	GTG	GTC	TGT	TCC	CTG	GAC	GGG	CTG
LEU	VAL	SER	PRO	ARG	VAL	LEU	GLU	VAL	ASP	THR	GLN	GLY	THR	VAL	VAL	VAL	CYS	SER	LEU	ASP	GLY	LEU	
TTC	CCA	GTC	TCG	GAG	GCC	CAG	GTC	CAC	CTG	GCA	CTG	GAG	GAC	GGG	GAC	CAG	AGG	TTG	AAC	CCC	ACA	GTC	ACC
PHE	PRO	VAL	SER	GLU	ALA	GLN	VAL	HIS	LEU	ALA	LEU	GLY	ASP	GLN	ARG	LEU	ASN	PRO	THR	VAL	THR		
TAT	GGC	AAC	GAC	TCC	TTC	TCG	GCC	AAG	GCC	TCA	GTC	AGT	GTG	ACC	GCA	GAG	GAC	GAG	GAG	GGC	ACC	CAG	
TYR	GLY	ASN	ASP	SER	PHE	SER	ALA	LYS	ALA	SER	VAL	SER	VAL	THR	ALA	GLU	ASP	GLU	GLY	THR	GLN		
CGG	CTG	ACG	TGT	GCA	GTA	ATA	CTG	GGG	AAC	CAG	AGC	CAG	GAG	ACA	CTG	CAG	GLN	THR	VAL	ACC	ATC	TAC	
ARG	LEU	THR	CYS	ALA	VAL	ILE	LEU	GLY	ASN	GLN	SER	GLN	GLU	THR	LEU	THR	VAL	THR	ILE	TYR			
AGC	TTT	CCG	GCG	CCC	AAC	GTG	ATT	CTG	ACG	AAG	CCA	GAG	GTC	TCA	GAA	GGG	ACC	GAG	GTG	ACA	GTG		
SER	PHE	PRO	ALA	PRO	ASN	VAL	ILE	LEU	THR	LYS	PRO	GLU	VAL	SER	GLU	GLY	THR	GLU	VAL	THR	VAL		
AAG	TGT	GAG	GCC	CAC	CCT	AGA	GCC	AAG	GTG	ACG	CTG	AAT	GGG	GTT	CCA	GCC	CAG	CCA	CTG	GGC	CCG		
LYS	CYS	GLU	ALA	HIS	PRO	ARG	ALA	LYS	VAL	THR	LEU	ASN	GLY	VAL	PRO	ALA	GLN	PRO	LEU	GLY	PRO		
AGG	GCC	CAG	CTC	CTG	CTG	LEU	LEU	ACC	CCA	GAG	GAG	GGG	CGC	AGC	AGC	TTT	TCC	TGC	TCT	GCA	ACC		
ARG	ALA	GLN	LEU	LEU	LEU	LYS	ALA	THR	PRO	PRO	GLU	ASP	ASN	GLY	ARG	SER	PHE	SER	CYS	SER	ALA	THR	
CTG	GAG	GTG	GCC	GGC	CAG	CTT	ATA	CAC	AAG	AAC	CAG	ACC	CGG	GAG	CCT	CGT	GTC	CTG	TAT	GGC	CCC		
LEU	GLU	VAL	ALA	GLY	GLN	LEU	ILE	HIS	LYS	ASN	GLN	THR	ARG	GLU	LEU	ARG	VAL	LEU	TYR	GLY	PRO		
CGA	CTG	GAC	GAG	AGG	GAT	TGT	CCG	GGA	AAC	TGG	ACG	TGG	CCA	GAA	AAT	TCC	CAG	CAG	ACT	CCA	ATG		
ARG	LEU	ASP	GLU	ARG	ASP	CYS	PRO	GLY	ASN	TRP	THR	TRP	PRO	GLU	ASN	SER	GLN	THR	PRO	MET			
TGC	CAG	GCT	TGG	GGG	AAC	CCA	TTG	CCC	GAG	CTC	AAG	TGT	CTA	AAG	GAT	GGC	ACT	TTC	CCA	CTG	CCC		
CYS	GLN	ALA	TRP	GLY	ASN	PRO	LEU	PRO	GLU	LEU	LYS	CYS	LEU	LYS	ASP	GLY	THR	PHE	PRO	LEU	PRO		

FIG. 1B

ATC GGG GAA TCA GTG ACT GTC ACT CGA GAT CTT GAG GGC ACC TAC CTC TGT CCG GCC AGG AGC ACT
 ILE GLY GLU SER VAL THR VAL THR VAL THR ARG ASP LEU LEU GLU GLY THR TYR LEU CYS ARG ALA ARG SER THR

 CAA GGG GAG GTC ACC CGC GAG GTC ACC GTG AAT GTG CTC TCC CCC CCG TAT GAG ATT GTC ATC ATC
 GLN GLY GLU VAL THR ARG GLU VAL THR VAL ASN VAL LEU SER PRO ARG TYR GLU ILE VAL ILE ILE

 ACT GTG GTA GCA GCC GCA GTC ATA ATG GGC ACT GCA GGC CTC ACC TAC TAC CTC TAT AAC CGC CAG
 THR VAL VAL ALA ALA ALA VAL ILE MET GLY THR ALA GLY LEU SER THR TYR LEU TYR ASN ARG GLN

 CGG AAG ATC AAG AAA TAC AGA CTA CAA CAG GCC CAA AAA GGG ACC CCC ATG AAA CCG AAC ACA CAA
 ARG LYS ILE LYS LYS TYR ARG LEU GLN ALA GLN LYS GLY THR PRO MET LYS PRO ASN THR GLN

 GCC ACG CCT CCC TGA ACCTATCCCG GGACAGGGCC TCTTCCTCGG CCTTCCCATA TTGGTGGCAG TGGTGCCACA
 ALA THR PRO PRO ***

 CTGAACAGAG TGGAAGACAT ATGCCATGCA GCTACACCTA CCGGCCCTGG GACGCCGGAG GACAGGGCAT TGTCCCTCAGT

 CAGATACAAC AGCATTGTTGG GCCATGGTAC CTGCACACCT AAAACACTAG GCCACGCATC TGATCTGTAG TCACATGACT

 AAGCCAAGAG GAAGGAGCAA GACTCAAGAC ATGATTGATG GATGTTAAAG TCTAGCCTGA TGAGAGGGGA AGTGGTGGG

 GAGACATAGC CCCACCATGA GGACATACAA CTGGGAAATA CTGAAACTTG CTGCCTATTG GGTATGCTGA GGCCACAGA

 CTTACAGAAG AAGTGGCCCT CCATAGACAT GTGTAGCATC AAAACACAAA GGCCACACT TCCTGACGGA TGCCAGCTTG

 GGCACTGCTG TCTACTGACC CCAACCCCTG ATGATATGTA TTTATTCAAT TGTATTTTA CCAGCTATTT ATTGAGTGTC

 TTTTATGTAG GCTAAATGAA CATAGGTCTC TGGCCTCAG GAGCTCCCAG TCCATGTCAC ATTCAAGGTC ACCAGGTACA

 GTTGACAGG TTGTACACTG CAGGAGAGTG CCTGGCAAAA AGATCAAAATG GGGCTGGGAC TTCTCATTTG CCAACCTGCC

 TTTCCCCAGA AGGAGTGATT TTTCTATCGG CACAAAAGCA CTATATGGAC TGGTAATGGT TCACAGGTTT AGAGATTACC

FIG. 1C

CAGTGAGGCC TTATTCCTCC CTTCCCCCA AACTGACAC CTTTGTTAGC CACCTCCCCA CCCACATACA TTTCTGCCAG
TGTTACAATG AACTCAGCG GTCATGTCTG GACATGAGTG CCCAGGGAAT ATGCCCAAGC TATGCCCTTGT CCTCTTGTCC
TGTTTGCAAT TCACTGGGAG CTTGCACTAT TGCAGCTCCA GTTCCTGCA GTGATCAGGG TCCTGCAAGC AGTGGGGAAG
GGGGCCAAGG TATTGGAGGA CTCCTCCCCA GCTTTGGAAG GGTCATCCGC GTGTGTGTGT GTGTGTATGT GTAGACAAGC
TCTCGCTCTG TCACCCAGGC TGGAGTGCAG TGGTGCAATC ATGGTTCACT GCAGTCTTGA CCTTTTGGGC TCAAGTGATC
CTCCCACCTC AGCCTCCTGA GTAGCTGGGA CCATAGGCTC ACAACACCAC ACCTGGCAA TTTGATTTT TTTTTTTTTT
TCAGAGACGG GGTCTCGCAA CATGCCCCAG ACTTCCTTG TGTAGTTAA TAAAGCTTC TCAACTGCCA AAAAAAAA
AAAAAA

FIG. 1D

FIG. 2A

TTCACATCAA AACTCCTATA CTGACCTGAG ACAGAGGCAG CAGTGATACC CACCTGAGAG ATCCTGTGTT TGA									
ACAACTG CTTCCCAAAA CGGAAAGTAT TTCAAGCCTA AACCTTTGGG TGAAAAGAAC TCTTGAAGTC ATG ATT met ile									
GCT TCA CAG TTT CTC TCA GCT CTC ACT TTG GTG CTT CTC ATT AAA GAG AGT GGA GCC TGG ala ser gln phe leu ser ala leu thr leu val leu leu ile lys glu ser gly ala trp									
TCT TAC AAC ACC TCC ACG GAA GCT ATG ACT TAT GAT GAG GCC AGT GCT TAT TGT CAG CAA ser tyr asn thr ser thr glu ala met thr tyr asp glu ala ser ala tyr cys gln gln									
AGG TAC ACA CAC CTC GTT GCA ATT CAA AAC AAA GAG ATT GAG TAC CTA AAC TCC ATA arg tyr thr thr his leu val ala ile gln asn lys glu glu ile glu tyr leu asn ser ile									
TTG AGC TAT TCA CCA AGT TAT TAC TGG ATT GGA ATC AGA AAA GTC AAC AAT GTG TGG GTC leu ser tyr ser pro pro ser tyr tyr trp ile gly ile arg lys val asn val trp val									
TGG GTA GGA ACC CAG AAA CCT CTG ACA GAA GAA GCC AAG AAC TGG GCT CCA GGT GAA CCC trp val gly thr thr gln lys pro leu thr thr glu glu ala lys asn trp ala pro gly glu pro									
AAC AAT AGG CAA AAA GAT GAG GAC TGC GTG GAG ATC TAC ATC AAG AGA GAA AAA GAT GTG asn asn arg gln lys asp glu glu asp cys val glu ile tyr ile lys arg glu lys asp val									
GCC ATG TGG AAT GAT GAG AGG TGC AGC AAG AAG AAG CTT GCC CTA TGC TAC ACA GCT GCC gly met trp asn asp glu arg cys ser lys lys lys leu ala leu cys tyr thr ala ala									
TGT ACC AAT ACA TCC TGC AGT GGC CAC GGT GAA TGT GTA GAG ACC ATC AAT AAT TAC ACT cys thr asn thr ser cys ser gly his gly glu cys val glu thr ile asn asn tyr thr									
TGC AAG TGT GAC CCT GGC TTC AGT GGA CTC AAG TGT GAG CAA ATT GTG AAC TGT ACA GCC cys lys cys asp pro gly phe ser gly gly leu lys cys glu gln ile val asn cys thr ala									

CTG	GAA	TCC	CCT	GAG	CAT	GGA	AGC	CTG	GTT	TGC	AGT	CAC	CCA	CTG	GGA	AAC	TTC	AGC	TAC
leu	glu	ser	pro	glu	his	gly	ser	leu	val	cys	ser	his	pro	leu	gly	asn	phe	ser	tyr
AAT	TCT	TCC	TGC	TCT	ATC	ACC	TGT	GAT	AGG	GGT	TAC	CTG	CCA	AGC	AGC	ATG	GAG	ACC	ATG
asn	ser	ser	cys	ser	ile	ser	cys	asp	arg	gly	tyr	leu	pro	ser	ser	met	glu	thr	met
CAG	TGT	ATG	TCC	TCT	GGA	GAA	TGG	AGT	GCT	CCT	ATT	CCA	GCC	TGC	AAT	GTG	GTT	GAG	TGT
gln	cys	met	ser	ser	gly	glu	trp	ser	ala	pro	ile	pro	ala	cys	asn	val	val	glu	cys
GAT	GCT	GTG	ACA	AAT	CCA	GCC	AAT	GGG	TTC	GTG	GAA	TGT	TTC	CAA	AAC	CCT	GGA	AGC	TTC
asp	ala	val	thr	asn	pro	ala	asn	gly	phe	val	glu	cys	phe	gln	asn	pro	gly	ser	phe
CCA	TGG	AAC	ACA	ACC	TGT	ACA	TTT	GAC	TGT	GAA	GAA	GGA	TTT	GAA	CTA	ATG	GGA	GCC	CAG
pro	trp	asn	thr	thr	cys	thr	phe	asp	cys	glu	glu	gly	phe	glu	leu	met	gly	ala	gln
AGC	CTT	CAG	TGT	ACC	TCA	TCT	GGG	AAT	TGG	GAC	AAC	GAG	AAG	CCA	ACG	TGT	AAA	GCT	GTG
ser	leu	gln	cys	thr	ser	ser	gly	asn	trp	asp	asn	glu	lys	pro	thr	cys	lys	ala	val
ACA	TGC	AGG	GCC	GTC	CGC	CAG	CCT	CAG	AAT	GGC	TCT	GTG	AGG	TGC	AGC	CAT	TCC	CCT	GCT
thr	cys	arg	ala	val	arg	gln	pro	gln	pro	gly	ser	val	arg	cys	ser	his	ser	pro	ala
GGA	GAG	TTC	ACC	TTC	AAA	TCA	TCC	TGC	AAC	TTT	ACC	TGT	GAG	GAA	GGC	TTC	ATG	TTG	CAG
gly	glu	phe	thr	phe	lys	ser	ser	cys	asn	phe	thr	cys	glu	glu	gly	phe	met	leu	gln
GGA	CCA	GCC	CAG	GTT	GAA	TGC	ACC	ACT	CAA	GGG	CAG	TGG	ACA	CAG	CAA	ATC	CCA	GTT	TGT
gly	pro	ala	gln	val	glu	cys	thr	thr	gln	gly	gln	trp	thr	gln	gln	ile	pro	val	cys
GAA	GCT	TTC	CAG	TGC	ACA	GCC	TTG	TCC	AAC	CCC	GAG	CGA	GGC	TAC	ATG	AAT	TGT	CTT	CCT
glu	ala	phe	gln	cys	thr	ala	leu	leu	ser	asn	pro	glu	arg	gly	tyr	met	asn	cys	leu
pro																			

FIG. 2B

AGT	GCT	TCT	GGC	AGT	TTC	CGT	TAT	GGG	TCC	AGC	TGT	GAG	TTC	TCC	TGT	GAG	CAG	GGT	TTT
ser	ala	ser	gly	ser	phe	arg	tyr	gly	ser	ser	cys	glu	phe	ser	cys	glu	gln	gly	phe
GTG	TTG	AAG	GGA	TCC	AAA	AGG	CTC	CAA	TGT	GGC	CCC	ACA	GGG	GAG	TGG	GAC	AAC	GAG	AAG
val	leu	lys	gly	ser	lys	arg	leu	gln	cys	gly	pro	thr	gly	glu	trp	asp	asn	glu	lys
CCC	ACA	TGT	GAA	GCT	GTG	AGA	TGC	GAT	GCT	GTC	CAC	CAG	CCC	CCG	AAG	GGT	TTG	GTG	AGG
pro	thr	cys	glu	ala	val	arg	cys	asp	ala	val	his	gln	pro	pro	lys	gly	leu	val	arg
TGT	GCT	CAT	TCC	CCT	ATT	GGA	GAA	TTC	ACC	TAC	AAG	TCC	TCT	TGT	GCC	TTC	AGC	TGT	GAG
cys	ala	his	ser	pro	ile	gly	glu	phe	thr	tyr	lys	ser	ser	cys	ala	phe	ser	cys	glu
GAG	GGA	TTT	GAA	TTA	TAT	GGA	TCA	ACT	CAA	CTT	GAG	TGC	ACA	TCT	CAG	GGA	CAA	TGG	ACA
glu	gly	phe	glu	leu	tyr	gly	ser	thr	gln	leu	glu	cys	thr	ser	gln	gly	gln	trp	thr
GAA	GAG	GTT	CCT	TCC	TGC	CAA	GTG	GTA	AAA	TGT	TCA	AGC	CTG	GCA	GTT	CCG	GGA	AAG	ATC
glu	glu	val	pro	ser	cys	gln	val	val	lys	cys	ser	ser	leu	ala	val	pro	gly	lys	ile
AAC	ATG	AGC	TGC	AGT	GGG	GAG	CCC	GTG	TTT	GGC	ACT	GTG	TGC	AAG	TTC	GCC	TGT	CCT	GAA
asn	met	ser	cys	ser	gly	glu	pro	val	phe	gly	thr	val	cys	lys	phe	ala	cys	pro	glu
GGA	TGG	ACG	CTC	AAT	GGC	TCT	GCA	GCT	CGG	ACA	TGT	GGA	GCC	ACA	GGA	CAC	TGG	TCT	GGC
gly	trp	thr	leu	asn	gly	ser	ala	ala	arg	thr	cys	gly	ala	thr	gly	his	trp	ser	gly
CTG	CTA	CCT	ACC	TGT	GAA	GCT	CCC	ACT	GAG	TCC	AAC	ATT	CCC	TTG	GTA	GCT	GGA	CTT	TCT
leu	leu	pro	thr	cys	glu	ala	pro	thr	glu	ser	asn	ile	pro	leu	val	ala	gly	leu	ser
GCT	GCT	GGA	CTC	TCC	CTC	CTG	ACA	TTA	GCA	CCA	TTT	CTC	CTC	TGG	CTT	CGG	AAA	TGC	TTA
ala	ala	gly	leu	ser	leu	leu	thr	leu	ala	pro	phe	leu	leu	trp	leu	arg	lys	cys	leu
CGG	AAA	GCA	AAG	AAA	TTT	GTT	CCT	GCC	AGC	AGC	TGC	CAA	AGC	CTT	GAA	TCA	GAC	GGA	AGC
arg	lys	ala	lys	lys	phe	val	pro	ala	ser	ser	cys	gln	ser	leu	glu	ser	asp	gly	ser

FIG. 2C

TAC CAA AAG CCT TCT TAC ATC CTT TAA GTTCAA AGAATCAGAA ACAGGTGCAT CTGGGGAAC T A
tyr gln lys pro ser tyr ile leu **
GAGGGATAC ACTGAAGTTA ACAGAGACAG ATAAC TCTCC TCGGGTCTCT GGCCCTTCTT GCCTACTATG CCAG
ATGCCCT TTATGGCTGA AACCGCAACA CCCATCACCA CTTCAATAGA TCAAACTCCA GCAGGCAAGG ACGGCCCT
TCA ACTGAAAAGA CTCAGTGTTT CCTTTCCTAC TCTCAGGATC AAGAAAGTGT TGGCTAATGA AGGGAAGAAGGA
TATTTTCTTC CAAGCAAAGG TGAAGAGACC AAGACTCTGA AATCTCAGAA TTCCTTTTCT AACTCTCCCT TG
CTCGCTGT AAAATCTTGG CACAGAAACA CAATATTTG TGGCTTCTT TCTTTTGCC TTCACAGTGT TTCGA
CAGCT GATTACACAG TTGCTGTCTAT AAGAATGAAT AATAATTATC CAGAGTTTAG AGGAAAAAAA TGACTAAA
AA TATTATAACT TAAAAAAATG ACAGATGTTG AATGCCACCA GGCAATGCA TGGAGGGTTG TTAATGGTGC
AAATCCTACT GAATGCTCTG TCGGAGGGTT ACTATGCACA ATTTAATCAG TTTCATCCCT ATGGGATTCA GTG
CTTCTTA AAGAGTTCTT AAGGATTGTG ATATTTTAC TTGCATTGAA TATATTATAA TCTTCCATAC TTCTTC
ATTC AATACAAGTG TGGTAGGGAC TTAAAAA ACT TGTAATGCT GTCAACTATG ATATGGTAAA AGTTACTTA
T TCTAGATTAC CCCCTCATTG TTTATTAACA AATTATGTTA CATCTGTTT AAATTTATTT CAAAAGGGA A
ACTATTGTC CCTAGCAAG GCATGATGTT AACCAAGATA AAGTTCTGAG TGTTTTACT ACAGTTGTTT TTTC
AAAACA TGGTAGAATT GGAGAGTAAA AACTGAATGG AAGGTTGTA TATTGTCAGA TATTTTTC GAAATAT
GTG GTTTCACCA TGAAAAA ACTT CCATGAGGCC AAACGTTTG AACTAATAA AGCATAAATG CAAACACACA
AAGGTATAAT TTTATGAATG TCTTTGTTGG AAAAGAATAC AGAAGATGG ATGTGCTTG CATTCCTACA AA
GATGTTG TCAGATGTGA TATGTAAACA TAATTCTTGT ATATTATGGA AGATTTTAAA TTCACAATAG AAAC

FIG. 2D

CACCA TGTAAAGAG TCATCTGGTA GATTTTAAC GAATGAAGAT GTCTAATAGT TATCCCTAT TTGTTTTC
TT CTGTATGTTA GGGTGCTCTG GAAGAGAGGA ATGCTGTGT GAGCAAGCAT TTATGTTTAT TTATAAGCAG
ATTTAACAAT TCCAAAGGAA TCTCCAGTTT TCAGTTGATC ACTGGCAATG AAAAATTCTC AGTCAGTAAT TGC
CAAAGCT GCTCTAGCCT TGAGGAGTGT GAGAATCAAA ACTCTCCTAC ACTTCCATTA ACTTAGCATG TGTGTA
AAA AAAAGTTTCA GAGAAGTTCT GGCTGAACAC TGGCAACGAC AAAGCCAACA GTCAAACACAG AGATGTGAT
A AGGATCAGAA CAGCAGAGGT TCTTTTAAAG GGCAGAAAA ACTCTGGGAA ATAAGAGAGA ACAACTACTG T
GATCAGGCT ATGTATGGAA TACAGTGTTA TTTTCTTTGA AATTGTTAA GTGTGTGAAA TATTATGTA AACT
GCATTA GAAATTAGCT GTGTGAAATA CCAGTGTGGT TTGTGTTTGA GTTTATTGA GAATTTTAAA TTATAAC
TTA AAATATTTTA TAAATTTTAA AGTATATATT TATTTAAGCT TATGTCAGAC CTATTGACA TAACACTATA
AAGGTGACA ATAAATGTGC TTATGTTT

FIG. 2E

FIG. 3A

CCGGCCCTCAC TGGCTTCAGG AGCTGAATAC CCTCCACAGGC ACACACAGGT GGGACACAAA TAAGGGTTTTT GGA
 ACCACTA TTTTCTCATC ACGACAGCAA CTTAAA ATG CCT GGG AAG ATG GTC GTG ATC CTT GGA GCC
 met pro gly lys met val ile leu gly ala
 TCA AAT ATA CTT TGG ATA ATG TTT GCA GCT TCT CAA GCT TTT AAA ATC GAG ACC ACC CCA
 ser asn ile leu trp ile met phe ala ala ser gln ala phe lys ile glu thr thr pro
 GAA TCT AGA TAT CTT GCT CAG ATT GGT GAC TCC GTC TCA TTG ACT TGC AGC ACC ACA GGC
 glu ser arg tyr leu ala gln ile gly asp ser val ser leu thr cys ser thr thr gly
 TGT GAG TCC CCA TTT TTC TCT TGG AGA ACC CAG ATA GAT AGT CCA CTG AAT GGG AAG GTG
 cys glu ser pro phe phe ser trp arg thr gln ile asp ser pro leu asn gly lys val
 ACG AAT GAG GGG ACC ACA TCT TCT ACG CTG ACA ATG AAT CCT GTT AGT TTT GGG AAC GAA CAC
 thr asn glu gly thr thr ser thr leu thr met asn pro val ser phe gly asn glu his
 TCT TAC CTG TGC ACA GCA ACT TGT GAA TCT AGG AAA TTG GAA AAA GGA ATC CAG GTG GAG
 ser tyr leu cys thr ala thr cys glu ser arg lys leu glu lys gly ile gln val glu
 ATC TAC TCT TTT CCT AAG GAT CCA GAG ATT CAT TTG AGT GGC CCT CTG GAG GCT GGG AAG
 ile tyr ser phe pro lys asp pro glu ile his leu ser gly pro leu glu ala gly lys
 CCG ATC ACA GTC AAG TGT TCA GTT GCT GAT GTA TAC CCA TTT GAC AGG CTG GAG ATA GAC
 pro ile thr val lys cys ser val ala asp val tyr pro phe asp arg leu glu ile asp
 TTA CTG AAA GGA GAT CAT CTC ATG AAG AGT CAG GAA TTT CTG GAG GAT GCA GAC AGG AAG
 leu leu lys gly asp his leu met lys ser gln glu phe leu glu asp ala asp arg lys
 TCC CTG GAA ACC AAG AGT TTG GAA GTA ACC TTT ACT CCT GTC ATT GAG GAT ATT GGA AAA
 ser leu glu thr lys ser leu glu val thr phe thr pro val ile glu asp ile gly lys
 GTT CTT GTT TGC CGA GCT AAA TTA CAC ATT GAT GAA ATG GAT TCT GTG CCC ACA GTA AGG
 val leu val cys arg ala lys leu his ile asp glu met asp ser val pro thr val arg

CAG GCT GTA AAA GAA TTG CAA GTC TAC ATA TCA CCC AAG AAT ACA GTT ATT TCT GTG AAT	gln ala val lys glu leu gln val tyr ile ser pro lys asn thr val ile ser val asn
CCA TCC ACA AAG CTG CAA GAA GGT GGC TCT GTG ACC ATG ACC TGT TCC AGC GAG GGT CTA	pro ser thr lys leu gln glu gly gly ser ser val thr met thr cys ser ser glu gly leu
CCA GCT CCA GAG ATT TTC TCG AGT AAG AAA TTA GAT AAT GGG AAT CTA CAG CAC CTT TCT	pro ala pro glu ile phe trp ser lys lys lys leu asp asn gly asn leu gln his leu ser
GGA AAT GCA ACT CTC ACC TTA ATT GCT ATG AGG ATG GAA GAT TCT GGA ATT TAT GTG TGT	gly asn ala thr leu thr thr leu ile ala met arg met glu asp ser gly ile tyr val cys
GAA GGA GTT AAT TTG ATT GGG AAA AAC AGA AAA GAG GTG GAA TTA ATT GTT CAA GCA TTC	glu gly val asn leu ile ile gly lys asn arg lys glu val glu leu ile val gln ala phe
CCT AGA GAT CCA GAA ATC GAG ATG AGT AGT GGT GGC CTC GTG AAT GGG AGC TCT GTC ACT GTA	pro arg asp pro glu ile glu met ser gly gly leu val val asn gly ser ser val thr val
AGC TGC AAG GTT CCT AGC GTG TAC CCC CTT GAC CCG CTG GAG ATT GAA TTA CTT AAG GGG	ser cys lys val pro ser val tyr pro leu asp arg leu glu ile glu leu leu lys gly
GAG ACT ATT CTG GAG AAT ATA GAG TTT TTG GAG GAT ACG GAT ATG AAA TCT CTA GAG AAC	glu thr ile leu glu asn ile glu phe pro thr leu glu asp thr asp met lys ser leu glu asn
AAA AGT TTG GAA ATG ACC TTC ATC CCT ACC ATT GAA GAT ACT GGA AAA GCT CTT GTT TGT	lys ser leu glu met thr phe phe ile pro thr ile glu asp thr thr gly lys ala leu val cys
CAG GCT AAG TTA CAT ATT GAT GAC ATG GAA TTC GAA CCC AAA CAA AGG CAG AGT ACG CAA	gln ala lys leu his ile asp asp met glu phe glu pro lys gln arg gln ser thr gln
ACA CTT TAT GTC AAT GTT GCC CCC AGA GAT ACA ACC GTC TTG CTC AGC CCT TCC TCC ATC	thr leu tyr val asn val ala pro arg asp thr thr thr val leu val ser pro ser ser ile
CTG GAG GAA GGC AGT TCT GTG AAT ATG ACA TGC TTG ACC CAG GGC TTT CCT GCT CCG AAA	leu glu glu gly ser ser val met thr cys leu ser gln gly phe pro ala pro lys

FIG. 3B

ATC/CTG TGG AGC AGG CAG CAG CTC CCT AAC GGG GAG CTA CAG CCT CTT TCT GAG AAT GCA ACT
 ile leu trp ser arg gln leu pro asn gly glu leu gln pro leu ser glu asn ala thr
 CTC ACC TTA ATT TCT ACA AAA ATG GAA GAT TCT GGG GTT TAT TTA TGT GAA GGA ATT AAC
 leu thr leu ile ser thr lys met glu asp ser gly val tyr leu cys glu gly ile asn
 CAG GCT GGA AGA AGC AGA AAG GAA GTG GAA TTA ATT ATC CAA GTT ACT CCA AAA GAC ATA
 gln ala gly arg ser arg lys glu val glu leu ile ile gln val thr pro lys asp ile
 AAA CTT ACA GCT TTT CCT TCT GAG AGT GTC AAA GAA GGA GAC ACT GTC ATC ATC TCT TGT
 lys leu thr ala phe pro ser glu ser val lys glu gly asp thr val ile ile ser cys
 ACA TGT GGA AAT GTT CCA GAA ACA TGG ATA ATC CTG AAG AAA AAA GCG GAG ACA GGA GAC
 thr cys gly asn val pro glu thr trp ile ile leu lys lys ala glu thr gly asp
 ACA GTA CTA AAA TCT ATA GAT GGC GCC TAT ACC ATC CGA AAG GCC CAG TTG AAG GAT GCG
 thr val leu lys ser ile asp gly ala tyr thr ile arg lys ala gln leu lys asp ala
 GGA GTA TAT GAA TGT GAA TCT AAA AAC AAA GTT GGC TCA CAA TTA AGA AGT TTA ACA CTT
 gly val tyr glu cys glu ser lys asn lys val gly ser gln leu arg ser leu thr leu
 GAT GTT CAA GGA AGA GAA AAC AAC AAA GAC TAT TTT TCT CCT GAG CTT CTC GTG CTC TAT
 asp val gln gly arg glu asn lys asp tyr phe ser pro glu leu val leu tyr
 TTT GCA TCC TCC TTA ATA ATA CCT GCC ATT GGA ATG ATA ATT TAC TTT GCA AGA AAA GCC
 phe ala ser ser leu ile ile pro ala ile gly met ile ile tyr phe ala arg lys ala
 AAC ATG AAG GGG TCA TAT AGT CTT GTA GAA GCA CAG AAA TCA AAA GTG TAG CTAATGCTTG
 asn met lys gly ser tyr ser leu val glu ala gln lys ser lys val ***

ATATGTTCAA CTGGAGACAC TATTATCTG TGCAAATCCT TGATACTGCT CATCATTCCT TGAGAAAAAC AAT
 GAGCTGA GAGGCAGACT TCCCTGAATG TATTGAACTT GGAAGAAAT GCCCATCTAT GTCCCTTGCT GTGAGC
 AAGA AGTCAAAGTA AAACCTTGCTG CCTGAAGAAC AGTAACTGCC ATCAAGATGA GAGAACTGGA GGAGTTCCT
 T GATCTGTATA TACAATAACA TAATTGTAC ATATGTAAAA TAAATATG CCATAGCAAG ATTGCTTAAAA

TAGCAACAC TCTATATTTA GATTGTTAA ATAAC TAGTG TGGCTTGGAC TATTATAATT TAATGCATGT TAGG
AAAAAT TCACATTAAAT ATTTGCTGAC AGCTGACCCTT TGTCACTCTT CTCTATTTT ATTCCCTTTC ACAAAT
TTT ATTCCTATAT AGTTTATTGA CAATAATTTC AGGTTTGT AAGATGCCGG GTTTATATT TTTATAGACA
AATAATAAGC AAAGGGAGCA CTGGCTTGAC TTTCAGGTAC TAAATACCTC AACCTATGGT ATAATGGTTG AC
TGGGTTTC TCTGTATAGT ACTGGCATGG TACGGAGATG TTTCACGAAG TTGTTTCATC AGACTCCTGT GCAAC
TTTCC CAATGTGGCC TAAAAATGCA ACTTCTTTT ATTTCTTTT GTAAATGTTT AGGTTTTTTT GTATAGTA
AA GTGATAATTT CTGGAATTAA AAA

FIG. 3D

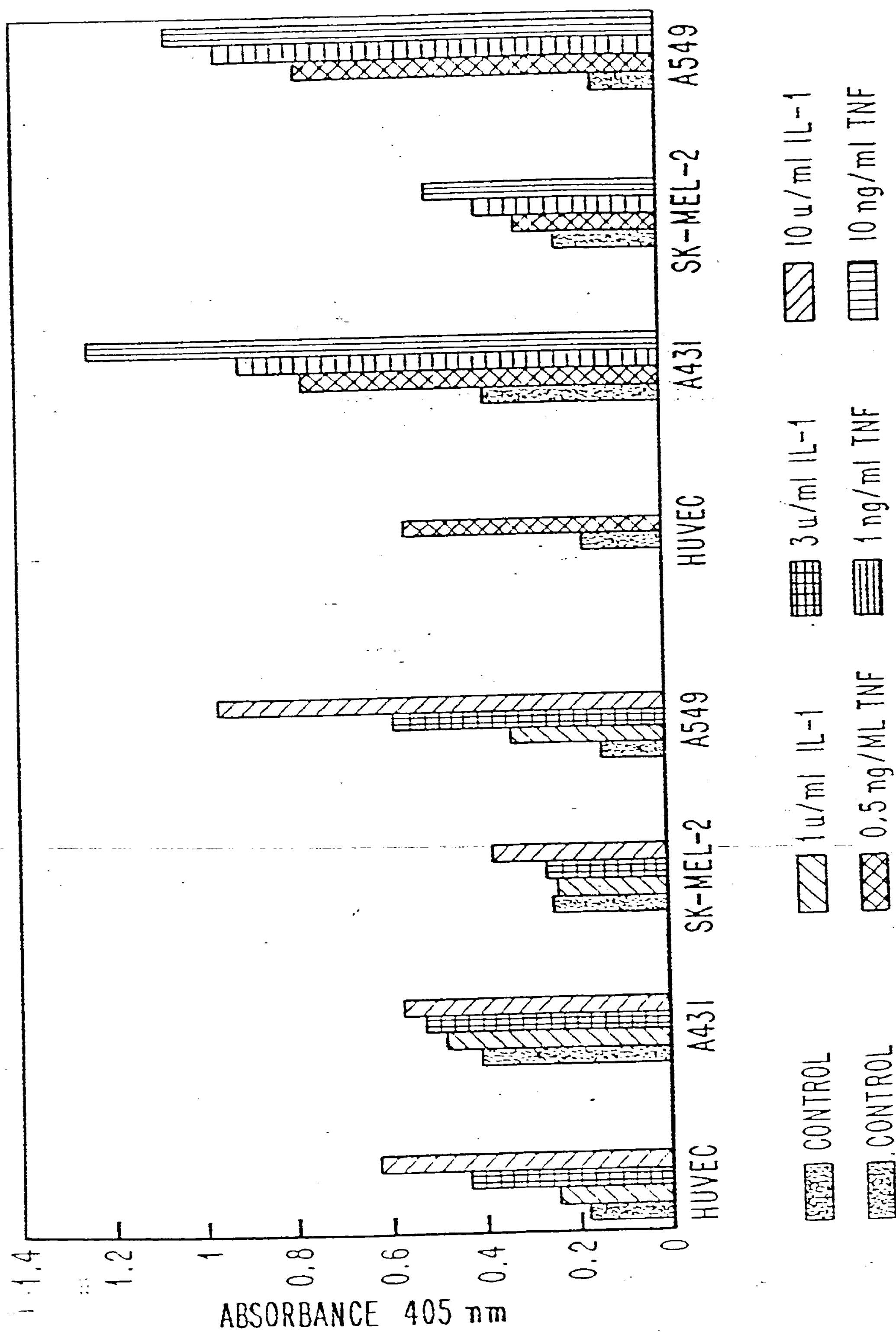


FIG. 4

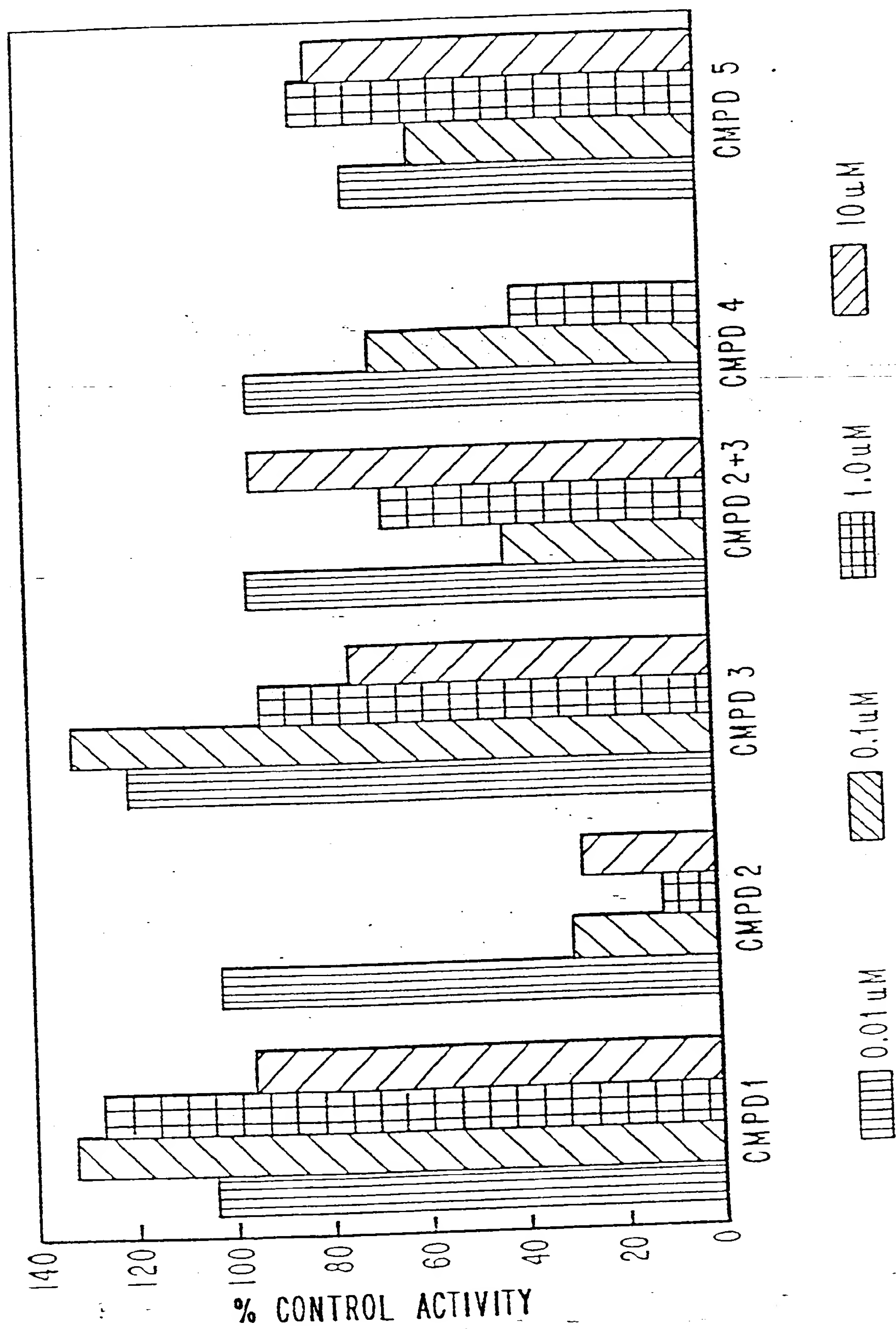


FIG. 5

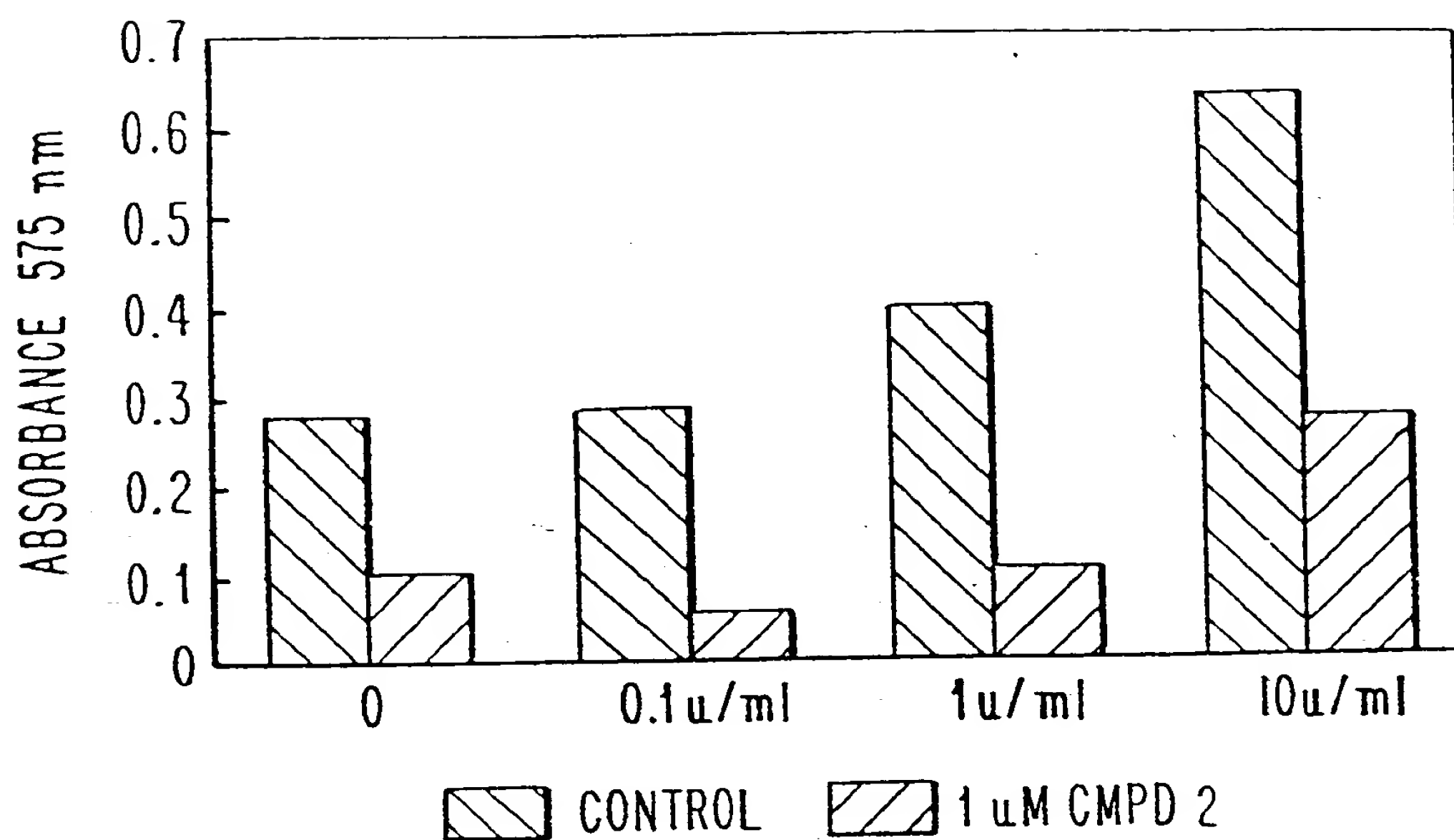


FIG. 6A

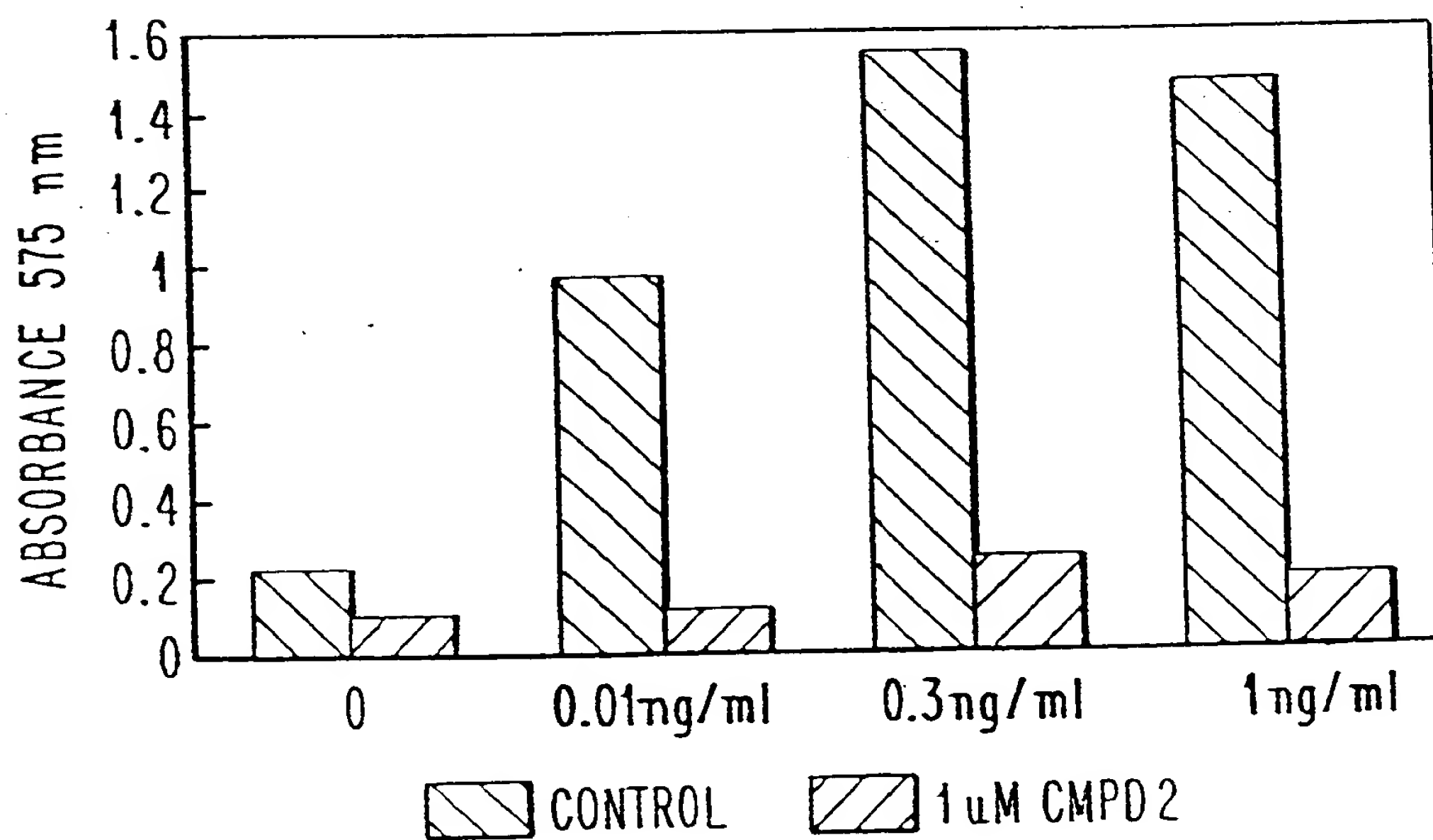


FIG. 6B

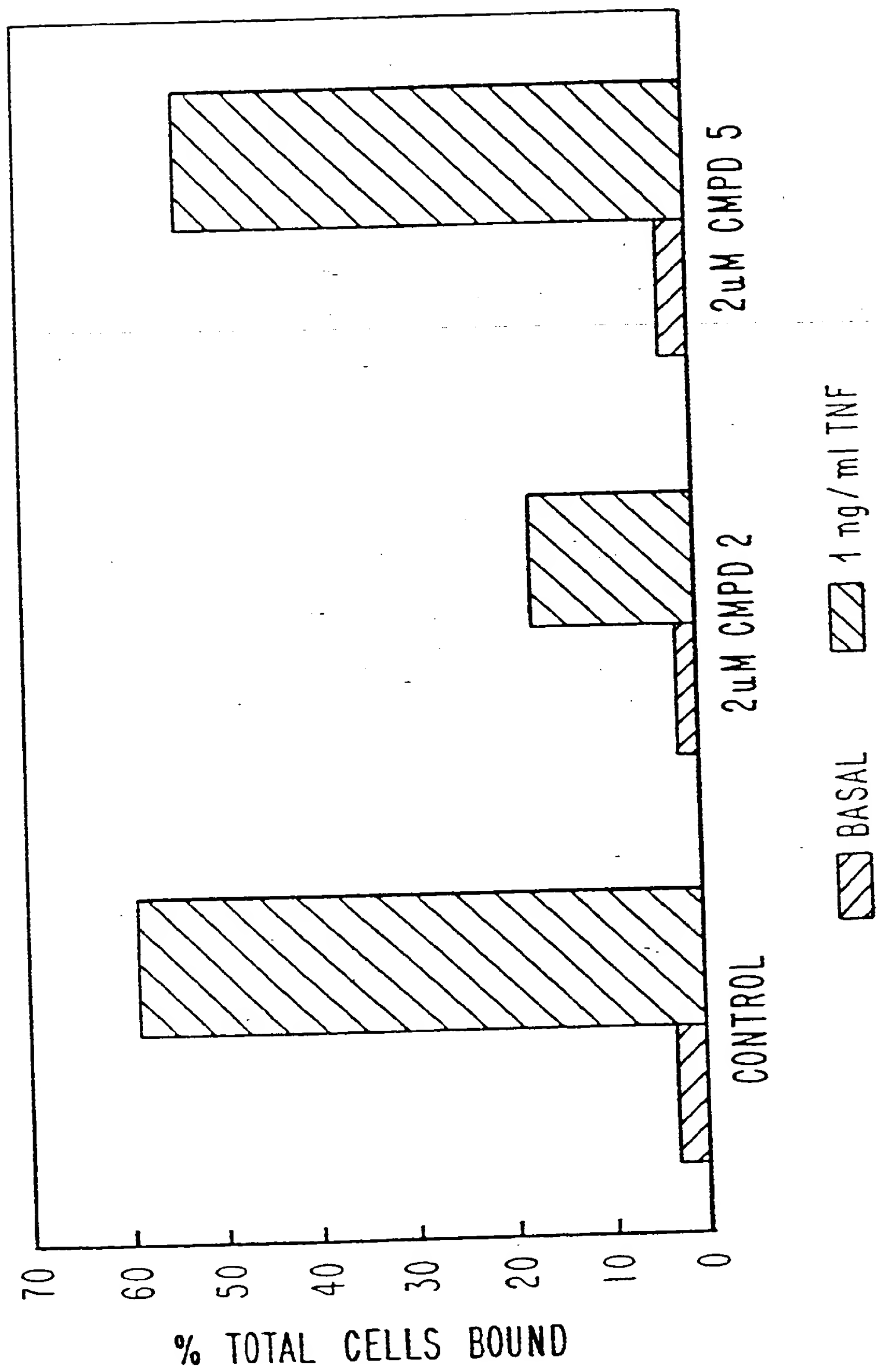
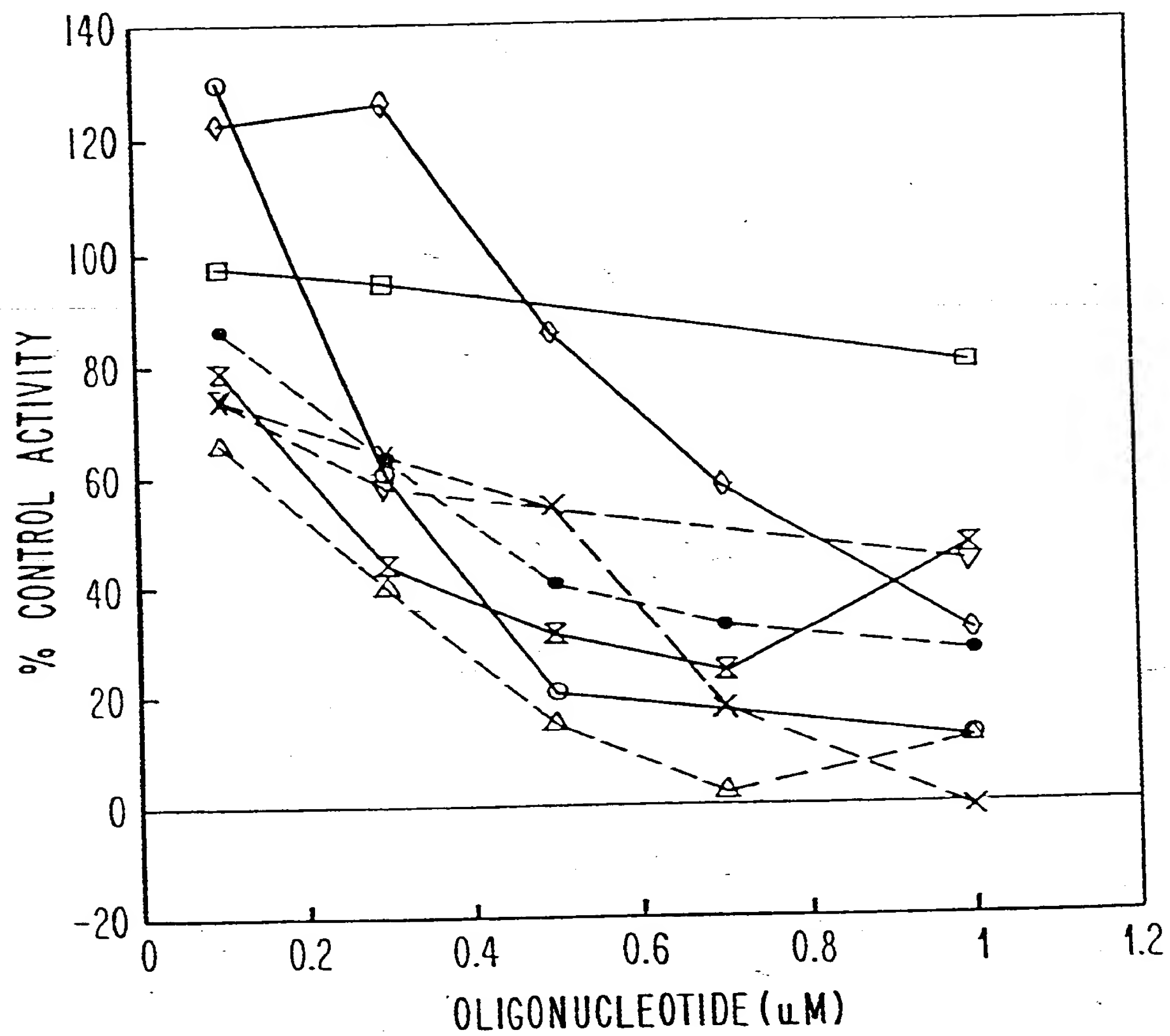
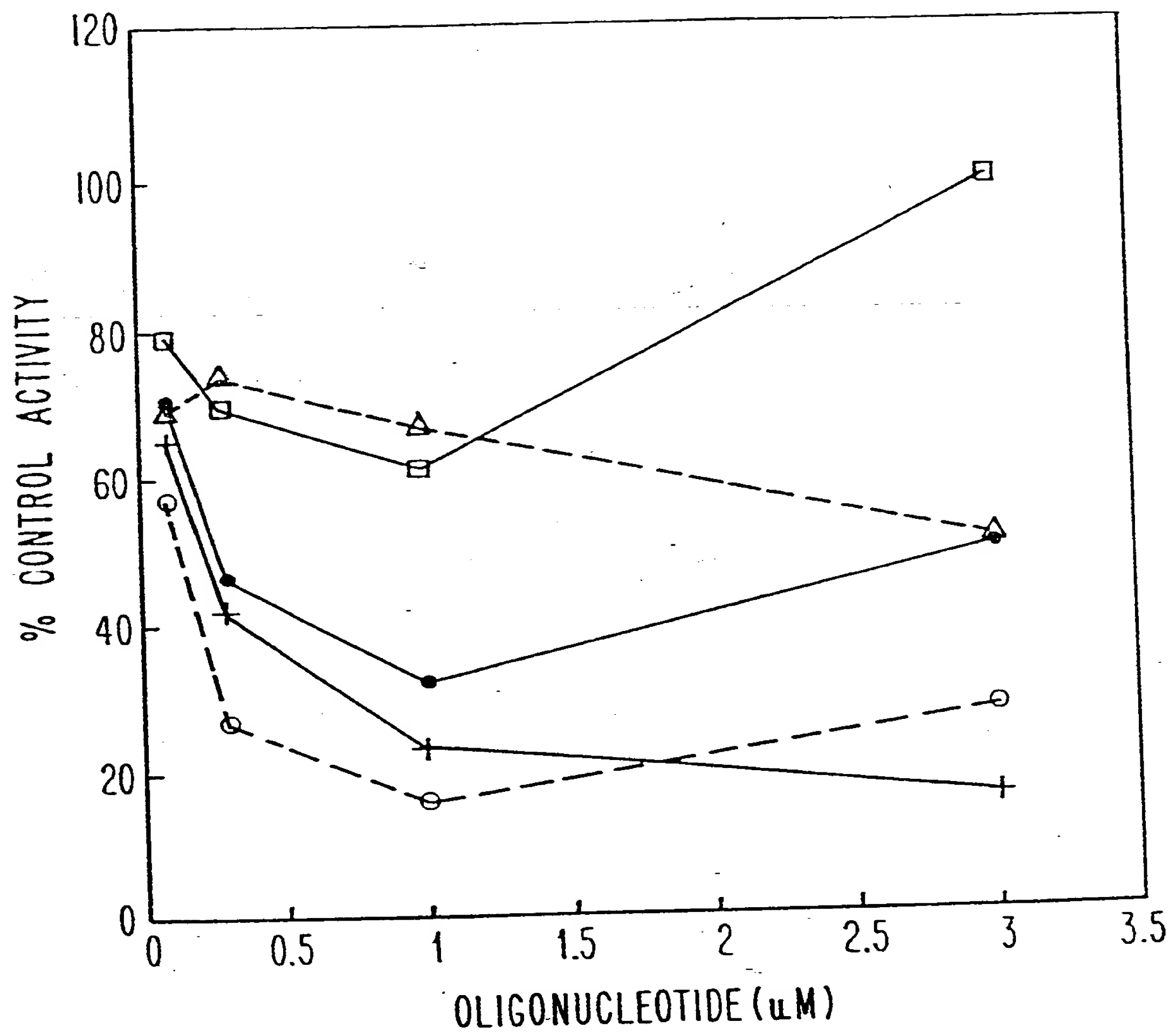


FIG. 7



● 1570	○ 3067	▽ 1931	□ 1932
× 1939	◇ 2307	△ 2302	⋈ 1938

FIG. 8



• 1570

+ 1939

△ 1940

□ 1821

○ 2302

FIG. 9

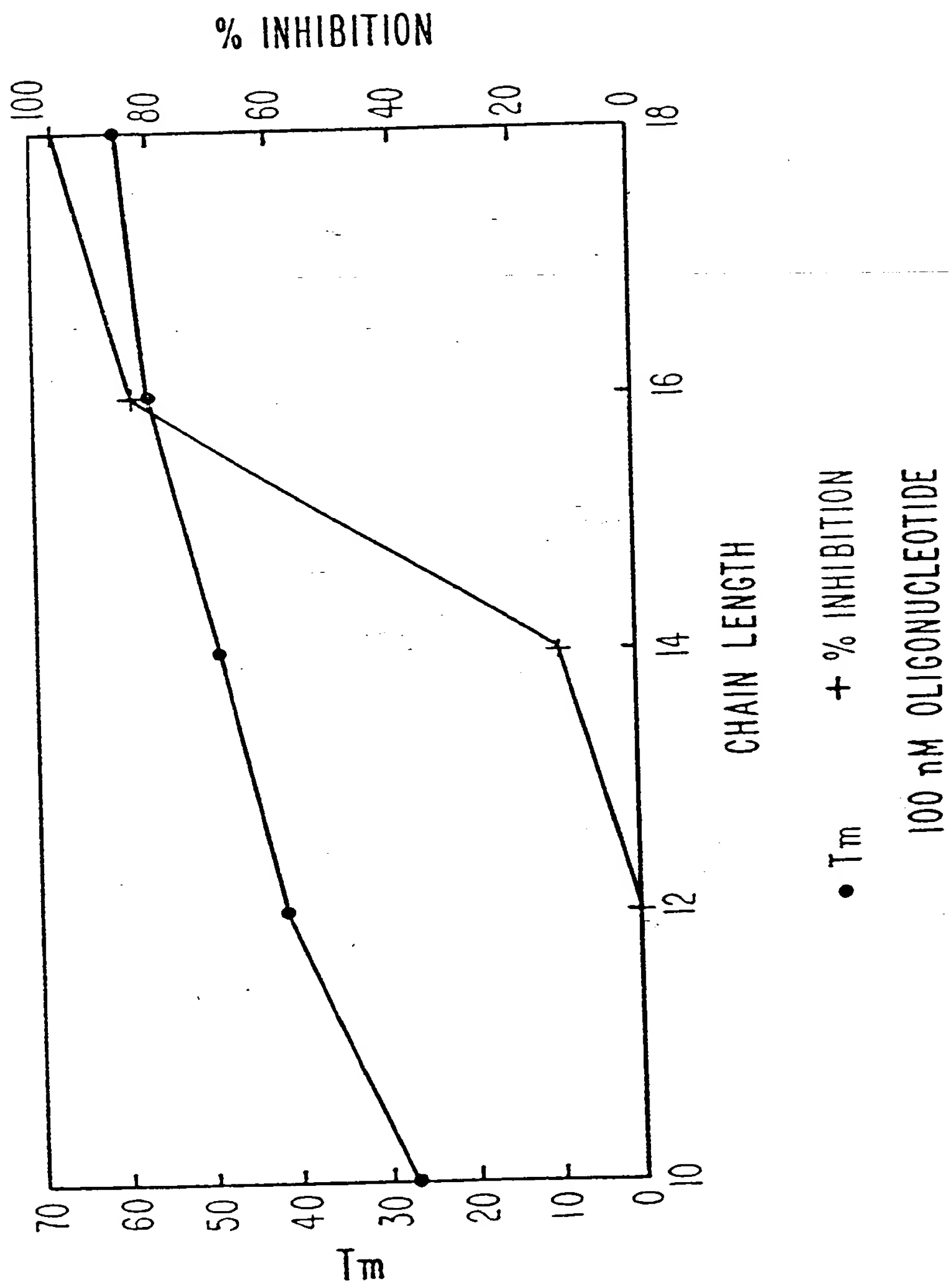


FIG. 10

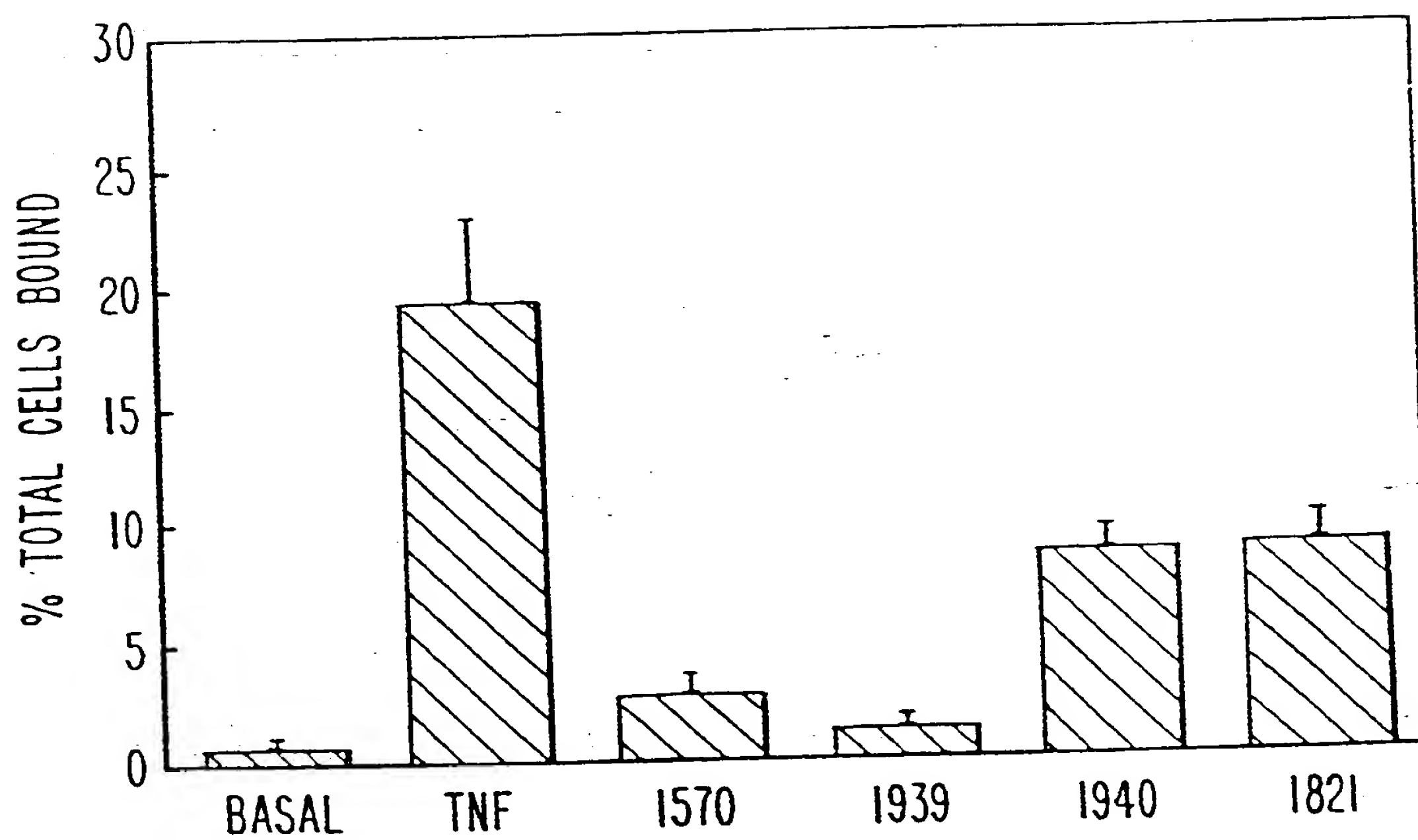


FIG. 11

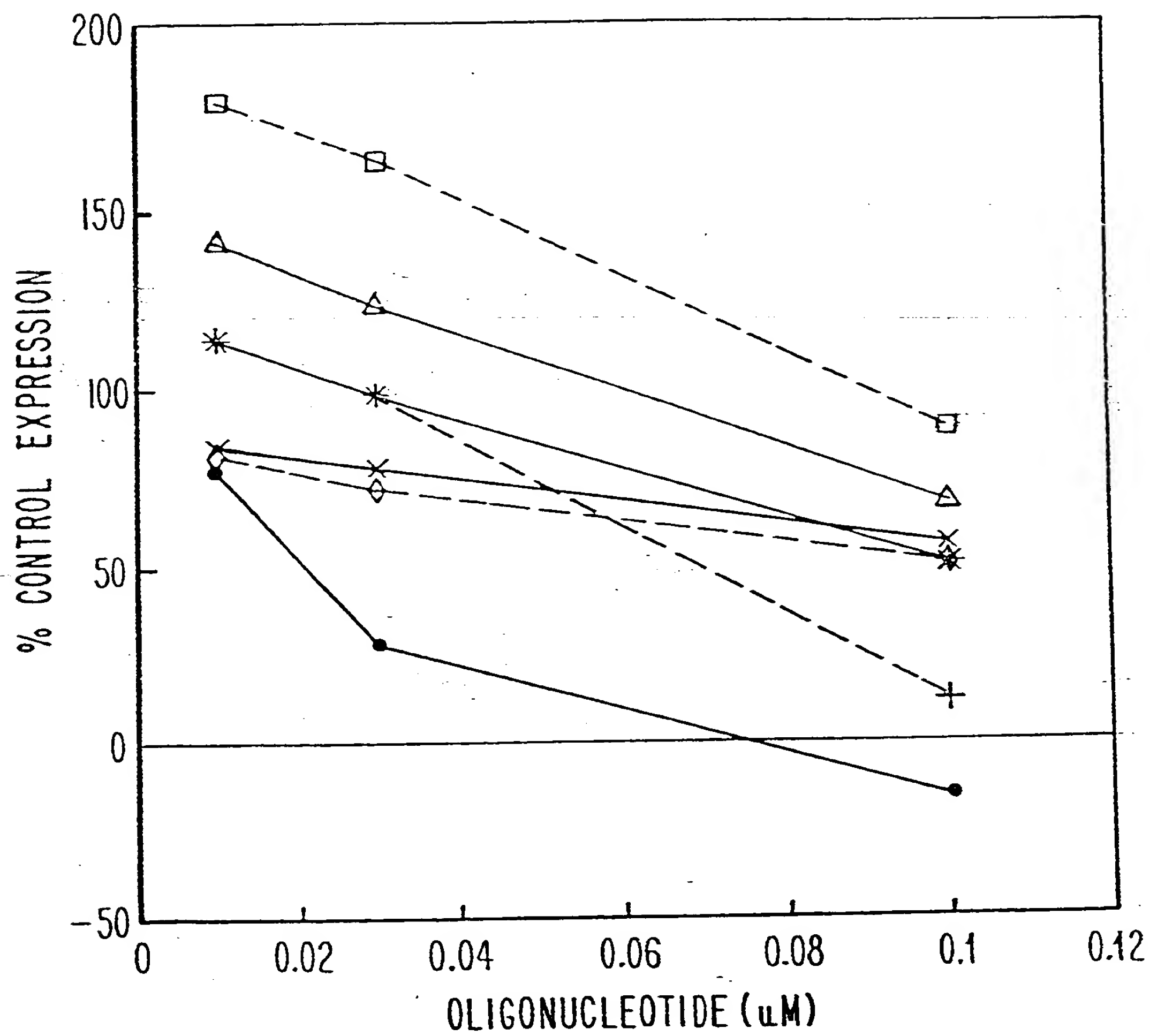


FIG. 12

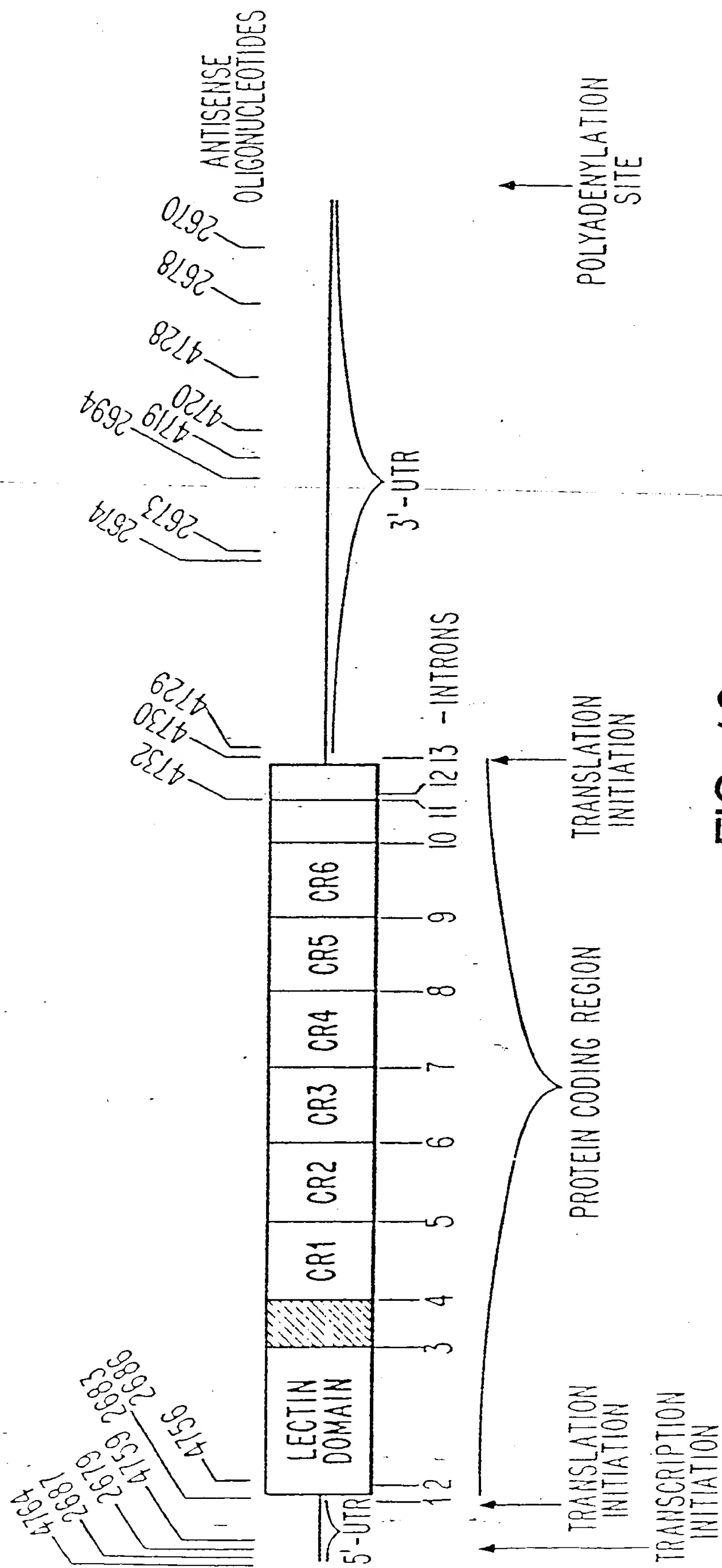


FIG. 13

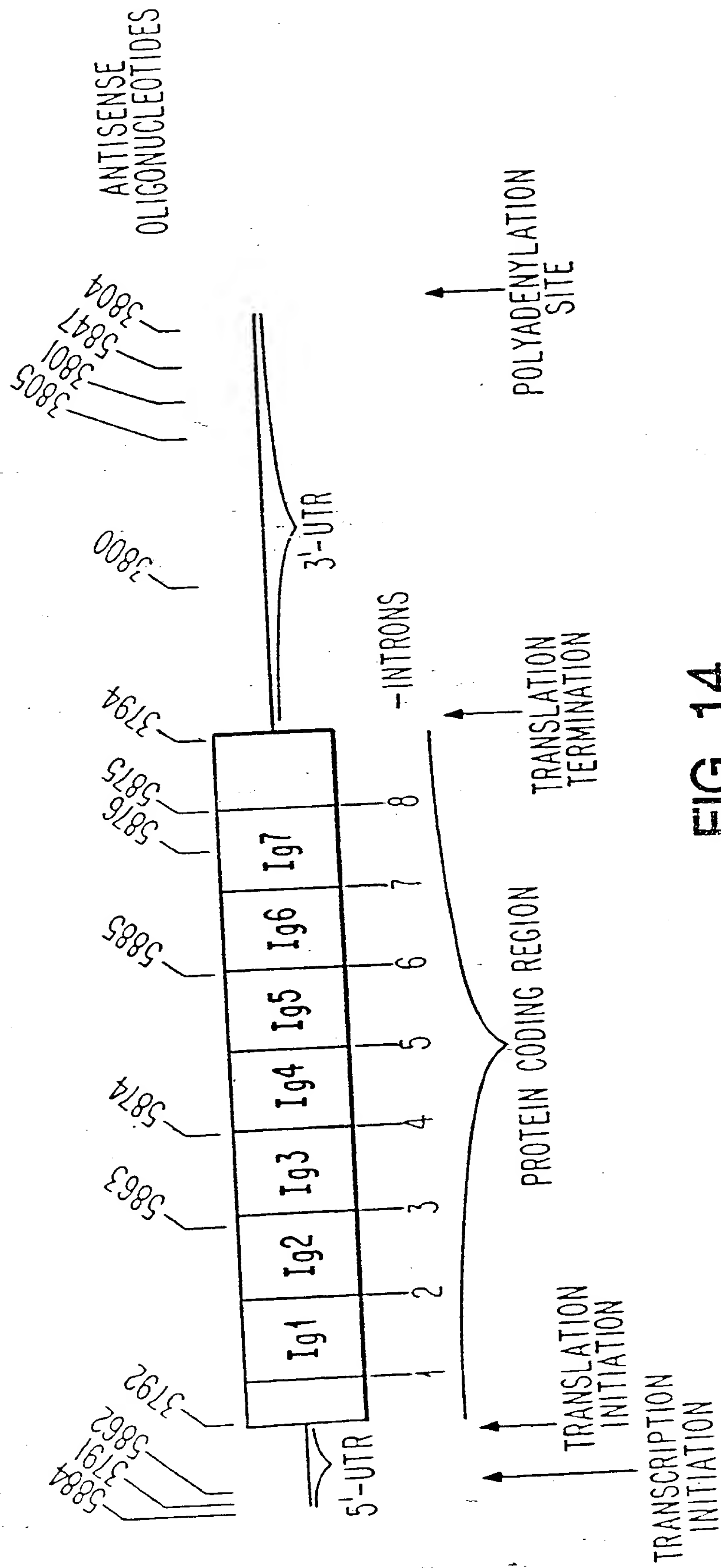


FIG. 14

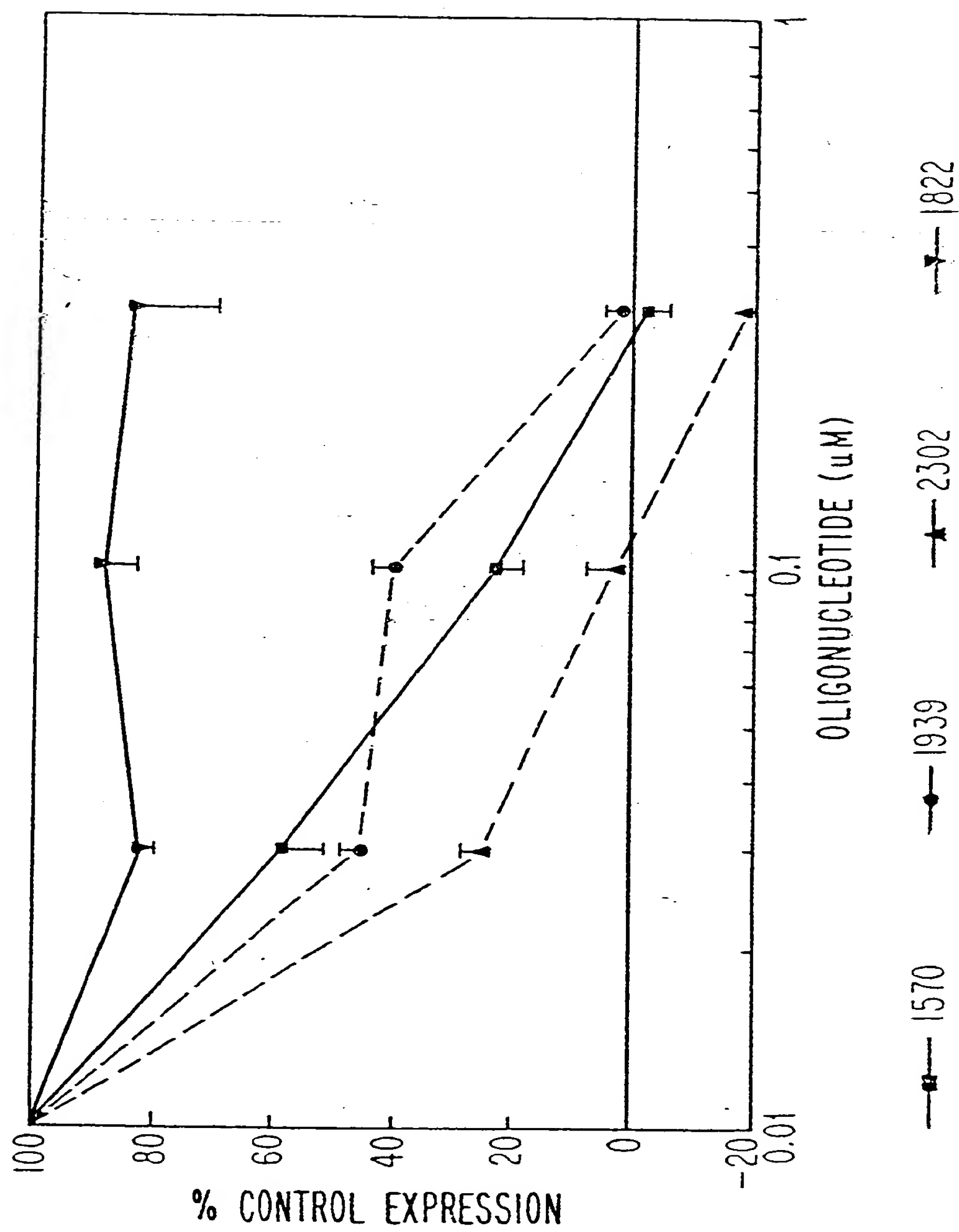


FIG. 15

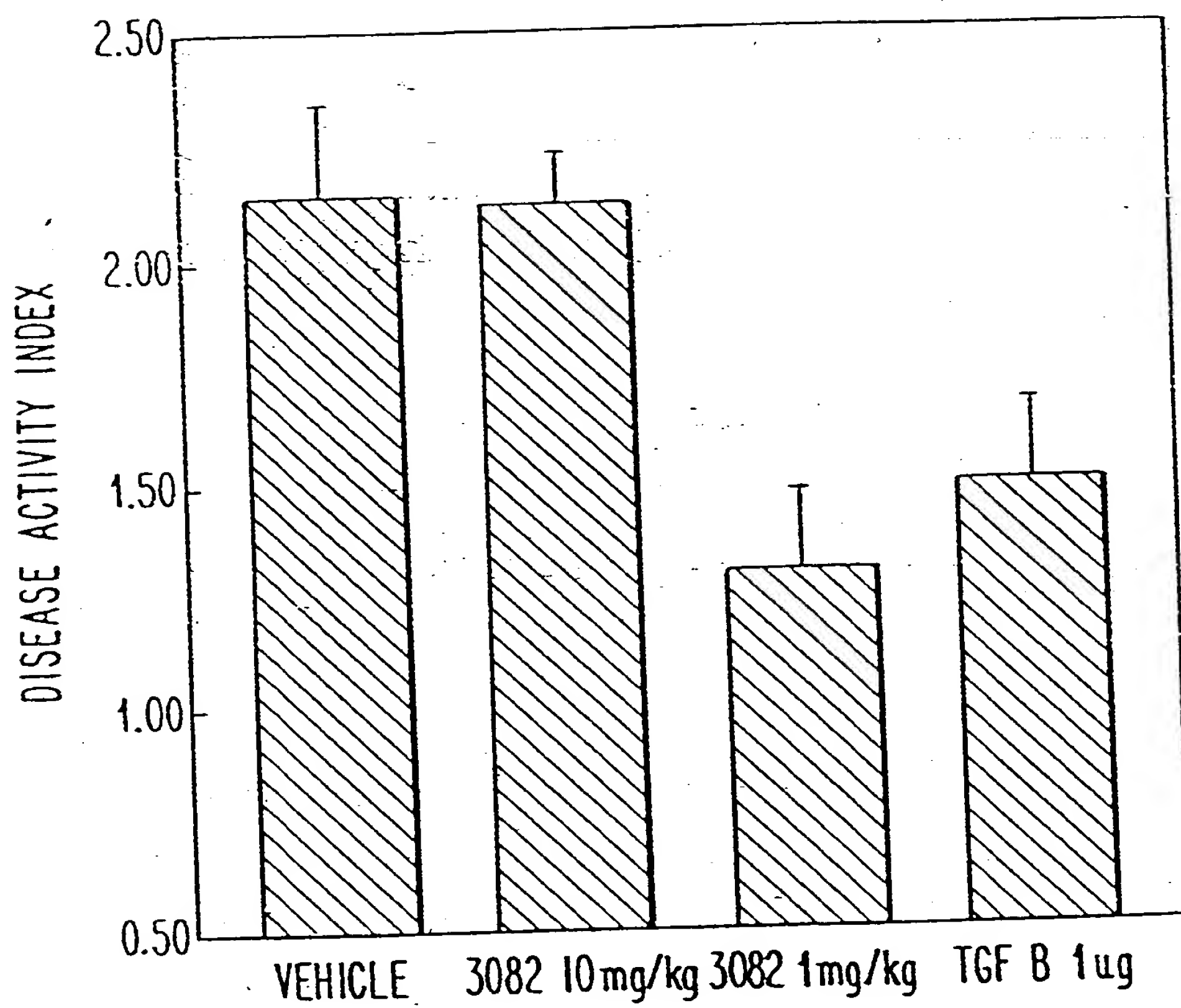


FIG. 16